

# **Facilities Division Integrated Safety Management Plan**

**March 16, 2006**

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## 1.0 Facilities Division Introduction

The Facilities Division commits itself to perform all work safely and in a manner that ensures protection of employees, the public, the environment, as well as Laboratory assets. Facilities Division management, staff, contractors, and guests are responsible and accountable for the safe performance of work. To achieve this goal, the Division subscribes to the seven guiding principles and five core functions defined in the Berkeley Lab Integrated ES&H Management Plan. The core functions are addressed primarily through the following Laboratory publications:

PUB-201	Regulations & Procedures Manual (RPM)
PUB-3000	Health and Safety Manual
PUB-3111	Operating and Assurance Plan (OAP)
PUB-5344	Environment, Safety & Health Self-Assessment Program

Work in the Facilities Division includes all planning, construction, maintenance, and repair activities for the physical plant at the Laboratory. In addition, general logistical services are provided. These include shipping, warehousing, material transportation, passenger transportation, fleet operations, mail services, stores, inventory management and managing the site cafeteria operation.

The scope of work in the Facilities Division is defined by the Division's Mission Statement:

***To support the Laboratory Mission of providing national scientific leadership and technological innovation by delivering reliable services and cost-effective stewardship of the Laboratory's natural and built environment through cooperative teamwork and commitment to professionalism, quality and safety.***

## 2.0 Integrated Safety Management

The objective of the Integrated Safety Management (ISM) is to implement Laboratory EH&S policies and procedures. The ISM defines roles and responsibilities for employees, guests, and contractors. The ISM plan will be reviewed and modified as necessary as part of the Division's annual Self-Assessment to assure continuous improvement.

## 3.0 Accountability

The Facilities Division Director is responsible and accountable for assuring that all Facilities Division activities are carried out in a safe manner, in accordance with all Laboratory requirements.

The Division's ES&H Coordinator is appointed by the Division Director. The Coordinator oversees the Division ES&H program, including review of pertinent safety documents, coordinates Accident Investigation Board reviews, manages the Division Cross-Shop inspection program, audits JHQ compliance, and attends the Division Wide Safety Committee. The Safety Coordinator is also responsible for Self-Assessment, yearly updating the chemical management inventory, the HEAR database, and ensuring that the Facilities Division ISM Plan is annually updated. Ergonomic evaluations will be updated every two years.

All Facilities supervisory and management personnel have a responsibility to follow the seven guiding principles and five core functions derived from DOE Order 450.4. They are responsible to ensure that employees receive ES&H training that is appropriate to the tasks being performed, and that work follows all applicable ES&H regulations, authorizations and requirements.

Supervisors are responsible for creating a safe workplace. They are to model safe behavior and provide leadership in EH&S by:

1. Being familiar with PUB 3000 and other relevant EH&S policies
2. Accountability lies with the line supervisors who define tasks, define safety-related expectations, and write and sign performance reviews for each of their direct reports via the annual PRD process
3. Supervisors are required to take EH&S20. In addition all shop "craft" supervisors are required to take EH&S023
4. Take preventive actions to minimize injuries and illnesses, property damage and adverse environmental impact
5. Thoroughly investigate all accidents near misses and complete SARR within 48 hours
6. Promote the early reporting for all injuries (including ergonomic) and near miss events
7. Document any deviation from policies and procedures that could result in accidents and/or injuries to the employees or others as well as environmental incidents.
8. Encouraging their employees to participate in the Division's various EH&S Committees.
9. Ensure that engineering controls are certified/checked, calibrated, and/or serviced prior to use within the required schedule.
10. Terminate or suspend operations when approvals are lacking, authorizations have expired, or training is not current.
11. Proactive safety management involves management taking the initiative to conduct periodic safety walk-around of the work areas occupied by their employees, as well as the storage rooms. Deficiencies are tracked in CATS.
12. When safety issues cannot be resolved by line manager or immediate supervisor (beyond the scope and capability), the issue needs to be elevated to the appropriate next level of management.

## **Line supervisor's employ the five core functions:**

### **Plan the work**

- Assure basic skills and qualifications of personnel are matched to the job
- Review JHQs for new employees, upon supervisory changes, for new assignments or for the same assignment at a new location.
- Review required training for all direct reports

### **Conduct a hazard analysis**

All work requires some form of hazard and risk analysis

- Analyze all non routine work assignments
- Analyze each time there is a significant change in task, scope, or personnel
- Maintain active collaboration with the EH&S Liaison to identify risks and hazards
- Conduct pre-job walk-around to review activities with hazards and risk prior to authorizing work

### **Establish controls**

#### **Implement controls for every hazard:**

- Assure appropriate engineering controls
- Assure procedural and administrative controls
- Assure personal protective equipment controls
- Maintain active collaborations with the EH&S liaison when establishing controls

### **Perform work while fully complying with established safety controls**

- Review procedures for completeness and accuracy
- Keep all authorizations current
- Lead safety walkthroughs and document the time, date, and observations sending the documentation to the safety coordinator
- Complete all safety corrective actions

### **Obtain feedback and implement improvements**

- Identify opportunities for improving controls and practices
- Review work performance and results to identify appropriate methods to improve the reliability and safety of work performance and operations
- Conduct and document regular safety meetings
- Maintain a file of lessons learned and assure the results are well distributed and understood

Employees, guests, and contractors are responsible for understanding and complying with the provisions of this plan. Employees, guests, and contractors are expected to follow EH&S requirements that apply to their work. They are expected to understand, and be trained to deal with the hazards associated within the scope of their employment, to work safely, to report all unsafe conditions and accidents to their supervisors and to comply with the Division's EH&S requirements.

All Facilities Division employees, contractors, and guests are responsible for stopping work that is considered to pose imminent danger. If there are concerns about the safety, health effects, or environmental impact, employees performing the work must stop the work and ask their supervisor, the Division Safety Coordinator, or a EH&S Division liaison for assistance to resolve the issue before proceeding.

## **4.0 Compliance of Hazardous Waste Satellite Accumulation Areas (SAAs)**

All Hazardous waste generated shall be appropriately and accurately labeled, contained, and disposed of in accordance with LBNL and California state regulations. All waste that is ignitable, toxic corrosive and /or reactive is determined to be chemically hazardous and shall be kept in a Satellite Accumulation Area (SAA). The safety coordinator will keep a list of all SAA's in the division and must be notified before an accumulation area is established or removed.

## **5.0 Facilities Division ES&H Committees**

The Division Executive Safety Committee is chaired by the Division Director, and consists of senior line management, the Division ES&H coordinator, the chairperson of the Behavior Based Accident Prevention (BBAP) Program Steering Committee and the EHS Division Liaison (as guest). This committee sets the EH&S policy for the Division. This is a monthly meeting.

The Division has two Department Safety Committees which are chaired by a Department Manager or representative and consists of representatives from each of the major groups within the Department. These committees are responsible for reviewing the Department's safety policies and for promoting enhanced work planning to ensure EH&S is integrated into every job project undertaken by the Department. The committees will analyze accident rates and trends and propose and implement action plans to address their findings. Site services and operations meet monthly.

The BBAP Steering Committee (WOW- Workers Observing Workers) consists of non-managerial representatives from within the Division. A chairperson is chosen by the Steering Committee. This committee is responsible for defining and promoting the BBAP program, training coaches and other participants, and scheduling and conducting observations. The Safety Coordinator serves as the management liaison to the program and administers the program's funding. This committee meets twice monthly. The coaches meet monthly. The mentors meet twice monthly.

## **6.0 Operations and Work Authorization**

Division managers and supervisors are responsible for considering ES&H hazards, risks, and concerns during the work planning process, and ensuring that appropriate controls are determined and in place prior to authorizing work. Facilities work authorizations are tailored to the hazard of the work. Work recognized as posing special hazards is planned and authorized as described in Chapter 6 of PUB-3000, the ISMS< Section 1.3 of the OAP, and Facilities publications.

Prior to starting work, all routine job orders and requests for service/maintenance are reviewed for potential hazards by Facilities personnel. In addition, ES&H personnel are called in whenever the nature of the request indicates possible hazards or hazardous operations.

Planning and implementation of new construction, renovation of old facilities and other significant changes in the plant are reviewed for hazards by the Facilities' Projects group of this Division. An upgrade to the Maximo work order software program allows each work order to have a printout of all associated hazards and their recommended safety precaution.

The bid and award process includes a review of the subcontractor's safety record prior to awarding the contract. Subcontractor documentation of their health and safety programs is required, and reviewed prior to the start of any work. Subcontractor's Health and Safety program must meet LBNL requirements.

Students, contractors and other guests must follow the authorization requirements. These authorizations will specify training. It may be permissible for students to work under formal work authorizations without being formally added so long as they are directly supervised at all times by a lab employee listed on the authorization and follow all authorization requirements.

## **7.0 Qualifications and Training**

Each supervisor maintains a training matrix of required ES&H training courses for their employees. The Facilities Safety Coordinator and the manager of the ES&H training department mutually agree upon what are the required training courses for each department. Training completed is reported in the Lab database.

Students must be trained appropriately prior to doing work. Students must be continuously and properly supervised if not trained to work independently.

## **8.0 LBNL and UCB Memorandum of Understanding**

All work performed by Facilities Division employees, students or guests, at the UC Berkeley campus, will conform to the "Partnership Agreement Between UCB and LBNL Concerning Environmental, Health and Safety Policy and Procedures" dated March 15, 2004. Of particular relevance to the Facilities Division is Appendix B of the Partnership Agreement which specifically addresses construction, renovation and maintenance activities at the Donner and Calvin Buildings which are located on the UC Berkeley campus but occupied by LBNL employees.

The LBNL ISM system does not make a distinction between students and any other type of LBNL-associated personnel. Generally, if students are compensated then they are considered employees, and if they are not compensated they are considered Guests. The contract between

DOE and the University of California for operation of LBNL directs LBNL to assure safety in its operations “regardless of the performer of the work”. Students are to be afforded the same safety protections, and in turn have the same safety obligations, as any other LBNL personnel.

- Facilities line management is responsible for analyzing work of persons under their direction and for assuring that the proper training for safe conduct of work is identified and obtained. Until an individual has been properly trained they will work under the direct supervision of someone who is already trained. The type and method of training for work performed at UCB is specified by UC Berkeley.
- Facilities employees conducting Berkeley Lab sponsored work are free to implement controls and other measures beyond the institutional requirements if they deem it appropriate.
- Facilities employees working at UCB can request a joint safety assessment to further aid them in ensuring a safe workplace.

Facilities employees conducting Berkeley Lab sponsored work at UCB will provide an assurance that they have met UCB standards including properly specifying training requirements, obtaining and adhering to UCB work authorizations, and meeting UCB self-inspection requirements.

## **9.0 Balanced Resources**

Facilities Division incorporates appropriate resource allocation to support effective Division EH&S programs. Line managers will incorporate appropriate resource allocations for EH&S related activities into all budget and work planning-including costs of safety equipment, training, maintenance, waste disposal, and permits.

## **10.0 ES&H Resources**

To facilitate implementation and execution of the Facilities ES&H program, the following Division resources are made available:

- 1.0 FTE Division Facilities Safety Coordinator
- 1.0 FTE Construction Safety Engineer (matrixed from EH&S)

ES&H efforts are an integral part of all Facilities activities and are performed by all Division personnel as needed and appropriate to the job task. The estimated level of effort is anticipated to include, but not limited to:

- 1 hour per month for each member of the Facilities Executive Safety Committee.
- 1 hour per month for each member of the Department Safety Committee.
- 6 hours per month for each member of the BBAP-WOW Steering Committee.

6 hours per month for each member of the BBAP -WOW Observers.

The following resources are made available by the ES&H Division. They are available to assist the Facilities Division with aspects relating to the implementation of this plan.

ES&H Liaison	0.20 FTE
Industrial Hygiene	1.80 FTE
Occupational Safety	0.67 FTE
Fire Protection	0.75 FTE
Emergency Preparedness	0.20 FTE
Radiation Protection	0.01 FTE
Environmental Protection	1.60 FTE
Waste Protection	0.15 FTE
Waste building)	1.0 FTE (temporary person supporting demolition 51)
Total:	6.38 FTE



# Facilities Division

## Integrated Safety Management Plan

**Review and Approval**  
**March 20, 2006**



### **Signatures:**

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